

City of Fresno Department of Public Utilities

Strategic Business Plan 2014-2016

Introduction

The Department of Public Utilities (DPU) developed its first Strategic Business Plan (SBP) in 2003 as a way to better manage its operations. In 2010, DPU began using the Balanced Scorecard (BSC) methodology as a way to further improve its strategy implementation. The BSC identifies four perspectives, or strategic priorities, that an organization can use to ensure its goals and objectives are balanced across all stakeholders. The four BSC perspectives are financial, customers, internal processes and learning and growth. The Water Division has been conducting monthly business reviews using the BSC since 2010, while the Wastewater Management Division and the Solid Waste Management Division have begun using it more recently.

In 2008 the U.S. Environmental Protection Agency (EPA) collaborated with six national water and wastewater associations plus fifteen water and wastewater agencies from all over the U.S. to develop a utility-based planning tool called Effective Utility Management (EUM) that supplements the BSC. EUM identifies ten attributes for water and wastewater utilities to use as a basis for improving their operations.

The ten attributes are:

- 1. Product Quality
- 2. Customer Satisfaction
- 3. Employee and Leadership Development
- 4. Community Sustainability
- 5. Infrastructure Stability
- 6. Financial Viability
- 7. Operational Optimization
- 8. Operational Resiliency
- 9. Water Resource Adequacy
- 10. Stakeholder Understanding and Support



DPU has begun using EUM, combined with the BSC, to develop and implement SBPs for its divisions. The SBPs include the following components:

- Perspectives: strategic priorities that ensure objectives are balanced across all stakeholders
- **Objectives:** the highest-level goals of our organization
- Measures and Measure Targets: quantitative indicators that show when we've achieved our objectives
- Initiatives: time-bound, resourced improvement projects for achieving our measure targets and objectives

Department Mission

We deliver high quality utility services professionally, efficiently and in an environmentally responsible manner to ensure the health and safety of our community.

Department Vision

We are nationally recognized as a leading public utilities organization.

Department Operating Principles

- **Customer Focus** We are here to provide service to our customers and we respond to their needs and interests in a respectful, reliable and professional manner.
- **Financial Viability** We provide the best value for our customers by performing our work in a cost effective and innovative manner while ensuring adequate and affordable utility rates.
- Total Quality We provide the highest quality products and services so that we meet and exceed the expectations of our customers.
- **Environmental Responsibility** We plan and manage our operations as responsible stewards of our natural resources and the environment.
- Safety Awareness We perform our work with a high level of safety awareness for ourselves, our fellow employees and the general public.
- **Employee Respect** We respect and value the contributions of our employees because everyone is important to the success of our operations.

Providing Life's Essential Services

More than a half million people living in the greater Fresno area rely on the City of Fresno Department of Public Utilities (DPU) for sustainable water and wastewater services as well as refuse and recycling collection services.

The Water Division is responsible for delivering a safe, affordable and reliable supply of high-quality, potable water for domestic, commercial, institutional and industrial use.

The Wastewater Management Division is responsible for the collection, conveyance, treatment and reclamation (recycling) of wastewater generated by residential, commercial, institutional and industrial sewer customers.

The Solid Waste Management Division offers its residential customers convenient and cost efficient, refuse, recycling, and green waste collection services.

DPU Administration coordinates all of the City's utility services including oversight and support of its operating divisions in the areas of strategic business planning, performance improvement, resource management, organizational development, personnel and labor relations, fiscal management, project management, utility billing and collection, and utility planning and engineering.

The efficiency and quality of the department was officially recognized in May of 2012, when DPU earned accreditation from the American Public Works Association (APWA) by demonstrating exemplary management practices. In all, more than 330 APWA nationally-established best management practices were examined and DPU was found to have met or exceeded all of them, earning national accreditation through 2016, when the department will undergo the process of re-accreditation.

Water Division

The original Fresno water system began in 1876 as a nonprofit organization established by a group of public-minded citizens. Initially, the water system consisted of one pumping station, composed of small pumps and two storage tanks located above the second floor of an early building, located on Fresno Street between J and K Streets, presently known as Broadway and Fulton.

Now more than a hundred years later, as the City of Fresno has grown, so has our water system. The robust and sophisticated water system utilizes current technologies for producing, treating and distributing safe, affordable and reliable drinking water.

Approximately 180 Water Division employees manage the water system. Together, they operate approximately 260 pump stations throughout the City with a high-tech production and distributed control system, manage more than 200 acres of recharge basins, maintain nearly 1,800 miles of water pipeline, maintain approximately 11,000 fire hydrants and operate a 30 million gallon per day (MGD) Surface Water Treatment Facility in northeast Fresno plus a 2 MGD storage tank in southeast Fresno.

Wastewater Management Division (WMD)

The City of Fresno initiated its first sewer system in 1891 with the construction of an outfall sewer to a 40-acre "sewer farm" located southwest of Fresno. The acreage proved to be inadequate for the town and an additional 40 acres was purchased to increase capacity. The sewage was used for irrigating alfalfa crops. Eight septic tanks were constructed in 1907 to provide partial treatment of the sewage prior to land spreading and irrigation.

Today, approximately 165 employees treat and reclaim 60-70 million gallons per day (MGD) of wastewater in the Fresno-Clovis metropolitan area at an 80 MGD Regional Wastewater Reclamation Facility (RWRF) in southwest Fresno. It is the eighth largest wastewater reclamation facility in California. The Wastewater Management Division also operates a Power Generation Facility at the RWRF with a capacity of 9 megawatts, or enough to provide electricity for about 9,000 homes. The power, generated by a mixture of renewable methane gas from wastewater plant digesters and natural gas, is currently used to provide electricity at the RWRF.

Wastewater from homes and businesses in the metro area travels through approximately 1,700 miles of sanitary sewer lines, also maintained by the Wastewater Management Division, to the RWRF located in southwest Fresno. Treatment consists of primary and secondary treatment, as well as a process to treat solids removed in the process at the plant.

Solid Waste Management Division

The Solid Waste Management Division has approximately 180 employees who provide residents with household collection services for refuse, recycling and green waste. Each week the division services approximately 108,000 homes picking up over 4,400 tons of refuse, recyclables and green waste. The Solid Waste Management Division has been recognized nationally for achieving high levels of recycling and for its model recycling practices that are focused on achieving zero waste. Zero waste principles promote the highest and best use of materials to eliminate waste and pollution, emphasizing a closed-loop system of production and consumption, moving in logical increments toward the goal of zero waste.

The Utility Environment

The ever-demanding economic and fiscal environment for public water, wastewater and solid waste utilities has become even more challenging in the past several years. The economic problems that began with the 2007 housing market crisis have caused a delay in needed capital improvements for many utilities. This, in turn, has made the maintenance of service levels problematic, caused reserves to be reduced in many cases, created more public opposition to utility rate increases and made it more difficult to obtain approval for needed rate adjustments from political bodies.

According to a recent report sponsored by the American Water Works Association (AWWA), the above trends will likely be long-lasting, and in fact, a structural change may have occurred due to these and other factors:

- The excess housing inventory will likely take many years to reduce, which will dampen U.S. economic growth
- Grant funding, which has been fairly plentiful in the past, is currently very limited and additional funding for utility capital programs will be limited
- Repairing and replacing assets, especially underground assets, is a critical need, yet it is difficult for utilities to determine a process for efficiently and effectively meeting this objective
- Water and wastewater utilities are being impacted by climate change, which affects the predictability, timing and extent of natural rainfall and snowfall patterns
- Increasingly stringent federal and state regulatory requirements will continue to place significant funding demands on water,
 wastewater and solid waste utilities

Several steps were recommended by the AWWA report for public utilities to succeed in this shifting environment:

- Strive for continuous improvement through strategic planning and operational optimization
- Prepare a multi-year financial plan
- Utilize performance measure benchmarking
- Develop policies for funding reserves to prepare for unexpected events
- Identify key stakeholders and involve them early and often
- Educate the public as to why rate increases are necessary and about the long-term consequences of not maintaining the water and wastewater infrastructure

The City of Fresno Department of Public Utilities follows all of the above recommended steps and we believe that the 2014-2016 Strategic Business Plans for the Water, Wastewater Management and Solid Waste Management Divisions will position our utilities for continued success during these challenging times.

Strategy Maps

A strategy map is an important bridge from strategy development to strategy implementation. It provides the visual framework for integrating each division's objectives into the four perspectives of a Balanced Scorecard (financial, customers, internal processes and learning and growth). It also portrays the cause-and-effect relationships that exist among the various objectives. It shows how the objectives in the financial, learning and growth and internal process perspectives should be aligned to achieve the desired outcomes for satisfying customers and achieving the division's mission. The strategy maps for the Water, Wastewater Management and Solid Waste Management Divisions are shown on the subsequent pages.

Division Strategic Business Plans

The 2014-2016 Strategic Business Plans for each of the three divisions are shown on the following pages after the strategy maps. The plans show the objectives, measures and initiatives for each division and how they fit into the four perspectives of the Balanced Scorecard as well as the ten utility attributes of Effective Utility Management. The implementation of these plans is reviewed and discussed by management during monthly and quarterly business review meetings using the Balanced Scorecard for each division. Adjustments are made as needed and the plans are fully reviewed and updated every two years.

Water Strategy Map

Mission

We deliver high quality utility services professionally, efficiently and in an environmentally responsible manner to ensure the health and safety of our community.

BSC Perspectives

Stakeholder Understanding & Support

Customers

Satisfied Customers & Stakeholders

Objective

Ensure stakeholder awareness of the Water Division and the value of water

Objective

Expand Water
Division's leadership
role within the industry
and the community

Objective

Develop more collaborative relationships with other agencies

Internal Processes

Effective and Efficient Processes

Infrastructure Stability

Objective

Ensure infrastructure and assets are maintained, secured, replaced and upgraded

Water Resource Adequacy

Objective

Ensure and retain adequate water supply

Learning & Growth

Motivated and Prepared Workforce

Objective

Promote employee satisfaction, evaluation and recognition

Objective

Enhance workforce knowledge and skills

Objective

Improve internal Division communications

Objective

Promote employee safety, security and health

Financial

Sound Fiscal Management

Financial Viability

Employee and Leadership Development

Objective

Develop an adequate and equitable rate plan

Objective

Ensure effective budget development and compliance

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Wastewater Management Strategy Map

Mission

We deliver high quality utility services professionally, efficiently and in an environmentally responsible manner to ensure the health and safety of our community.

BSC Perspectives

Customers

Satisfied Customers & Stakeholders

Internal Processes

Effective and Efficient Processes

Learning & Growth

Motivated and Prepared Workforce

Financial

Sound Fiscal Management

Product Quality

Objective

Comply with local, state and federal standards to protect the health and safety of the public

Infrastructure Stability

Objective

Routinely assess infrastructure conditions based on asset type

Objective

Ensure infrastructure and assets are maintained, secured, replaced and upgraded

Operational Optimization

Objective

Expand the use of technology

Objective

Maximize utilization of renewable resources

Objective

Continue to improve process efficiencies

Operational Resiliency

Objective

Ensure continuous operations during emergency events

Objective

Promote employee safety, security and health

Employee and Leadership Development

Objective

Attract, recruit and retain qualified staff

Objective

Enhance workforce knowledge and skills

Financial Viability

Objective

Ensure effective budget development and compliance

Objective

Develop an adequate and equitable rate plan

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Solid Waste Strategy Map

Mission

We deliver high quality utility services professionally, efficiently and in an environmentally responsible manner to ensure the health and safety of our community.

BSC Perspectives

Customers

Satisfied Customers & Stakeholders

Internal **Processes**

Effective and **Efficient Processes**

Learning & Growth

Motivated and Prepared Workforce

Financial

Sound Fiscal Management

Product Quality

Objective

Ensure adequate sorting of commodities/ materials by customers

Objective Ensure compliance with state and local mandates for diversion

Customer Satisfaction

Objective

Provide timely, reliable service to all customers

Objective

Leave neighborhoods better than we found them

Operational Optimization

Objective

Expand the use of technology

Objective

Continue to improve process efficiencies

Objective

Improve fleet management

Employee and Leadership Development

Objective

Enhance and develop staff through training efforts

Objective

Provide promotional opportunities for staff

Objective

Improve internal division communications

Financial Viability

Objective

Develop an adequate and equitable rate plan

Objective

Ensure effective budget development and compliance

Objective

Maintain adequate reserves for landfill maintenance

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Water Division Strategic Business Plan

PERSPECTIVES Strategic priorities that ensure balance across all	Financial	Internal Processes	Customers		Learning & Growth
stakeholders	Financial Viability	Infrastructure Stability	Water Resource Adequacy	Stakeholder Understanding & Support	Employee & Leadership Development
UTILITY ATTRIBUTES Desired outcomes for our organization to use in making improvements	Understand the full life-cycle cost of the utility and establish and maintain an effective balance between long-term debt, asset values, operations, and maintenance expenditures, and operating revenues. Establish predictable rates-adequate to recover costs, provide for reserves, maintain favorable bond rating agencies, and plan and invest for future needs.	Maintain and enhance the condition of all assets over the long-term at the lowest possible life-cycle cost and acceptable risk consistent with customer, community, and regulatory-supported service levels, and consistent with anticipated growth and system reliability goals.	Ensure water availability consistent with current and future customer needs through long-term resource supply and demand analysis, conservation, public education and industry leadership involvement.	Engage stakeholders, generate understanding and support from oversight bodies, community regulatory bodies for service levels, rate structures, operating budgets, capital improvement programs, and risk management decisions.	Recruit and retain a workforce that is competent, motivated, adaptive and safeworking. Establish a participatory, collaborative organization dedicated to continual learning. Ensure employee institutional knowledge is retained. Emphasize opportunities for professional and leadership development.
OBJECTIVES The highest level goals of our organization	 Ensure effective budget development and compliance Develop an adequate and equitable rate plan 	Ensure infrastructure and assets are maintained, secured, replaced and upgraded	Ensure and retain adequate water supply	 Ensure stakeholder awareness of the water division and the value of water Expand water division's leadership role within the industry and the community Develop more collaborative relationships with other agencies 	 Promote employee satisfaction, evaluation and recognition Enhance workforce knowledge and skills Improve internal division communications Promote employee safety, security and health
MEASURES Quantitative indicators that show when we have achieved our objectives	 Debt Coverage Ratio Days of Unrestricted Cash Percentage of Capital Expenditures to Total Capital Budget Bond Ratings Percentage of Annual O&M Budget Spent 	 Condition Assessment Coverage Asset Renewal/Replacement Leakage and Breakage Frequency Rate Planned Maintenance Ratio O&M Cost per Million Gallons of Water Delivered O&M Cost per Million Gallons of Surface Water Processed 	 Acre Feet of Surface Water Treated Percentage of Reduction in Gallons per Capita per Day Total Acre Feet Recharged at Basins Groundwater Table Elevation 	 Number of Informational Outreach Events and Other Public Educational Efforts Participated in Professional Attendance- Number of Employees Attending Professional Events, Planning Groups and Regional Efforts Professional Leadership Roles Achieved and Papers Submitted 	 Employee Job Satisfaction Percentage of Employee Evaluations Completed on Time Training Hours per Employee Number of Positions Vacant Key Position Internal/External Recruitment Employee Survey Score- Adequate Communication between Work Groups Total Recordable Incident Rate Percentage of Lost Work Days Due to OJI to Total Work Days
INITIATIVES Time-bound, resourced improvement projects for achieving our targets and objectives	 Gain approval for the proposed FY 2014-FY 2017 Four-Year Water Rate Plan Manage the Division's budget and finances to improve bond ratings Conduct a thorough risk assessment to improve operational efficiency, effectiveness and resiliency 	 Complete Water Master Plan by the end of 2013 Develop a Program Management Plan by January 2014 Conduct a PG&E billing analysis Complete Friant Kern pipeline Complete Chestnut extension NE SWTF plant improvements Re-rate NE SWTF filters 	 Complete Metro Plan by end of 2013 Prioritize long term resource contracts and agreements 	 Identify stakeholders and the best methods of conveying messages they need Identify and track professional attendance opportunities for employees Identify and track leadership opportunities as decision-makers and solicit and provide support for papers, presentations and abstracts 	 Implement AWWA Training Program Analyze and develop a plan for improving employee survey results

Wastewater Management Division Strategic Business Plan

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PERSPECTIVES Strategic priorities that ensure balance across all stakeholders	Customers	Financial	Internal Processes			Learning & Growth
	Product Quality	Financial Viability	Infrastructure Stability	Operational Optimization	Operational Resiliency	Employee & Leadership Development
UTILITY ATTRIBUTES Desired outcomes for our organization to use in making improvements	Produces treated effluent, and process residuals in full compliance with regulatory and reliability requirements and consistent with customer, public health, and ecological needs.	Understands the full life-cycle cost of the utility and establishes and maintains an effective balance between long-term debt, asset values, O & M expenditures, and operating revenues. Establishes predictable rates, consistent with community acceptability, adequate to recover costs, provide for reserves, maintain bond ratings, and plan and invest for future needs.	Maintain and enhance the condition of all assets over the long-term at the lowest possible life-cycle cost and acceptable risk consistent with customer, community, and regulatory-supported service levels, and consistent with anticipated growth and system reliability goals.	Ensures ongoing, timely, cost- effective, reliable, and sustainable performance improvements. Minimizes resource use, loss, and impacts from day-to-day operations. Maintains awareness of information and operational technology developments to anticipate and support timely adoption of improvements.	Ensures utility leadership and staff work together to anticipate and avoid problems. Proactively identifies, assesses, establishes tolerance levels for, and effectively manages a full range of business risks (including legal, regulatory, financial, environmental, safety, security, and natural disaster-related) in a proactive way consistent with industry trends and system reliability goals.	Recruit and retain a workforce that is competent, motivated, adaptive and safe-working. Establish a participatory, collaborative organization dedicated to continual learning. Ensure employee institutional knowledge is retained. Emphasize opportunities for professional and leadership development.
OBJECTIVES The highest level goals of our organization	Comply with local, state, and federal standards to protect the health and safety of the public	 Develop an adequate and equitable rate plan Ensure effective budget development and compliance 	 Ensure infrastructure and assets are maintained, secured, and upgraded Routinely assess infrastructure conditions based on asset type 	 Expand the use of technology maximize utilization of renewable resources Continue to improve process efficiencies 	 Ensure continuous operations during emergency events Promote employee safety, security and health 	 Attract, recruit, and retain qualified staff Enhance workforce knowledge and skills
MEASURES Quantitative indicators that show when we have achieved our objectives	 TSS Removal Efficiency BOD Removal Efficiency Number of SSO per 100 Miles Sample Turnaround Time Industrial Compliance Acre Feet of Water Reuse 	 Debt Coverage Ratio Percentage of Annual O&M Budget Spent Bond Ratings Percentage of Annual Budgeted Customer User Revenue Received Percentage of Targeted Project Milestones Met Capital Reserve Policy O&M Reserve Policy 	 Planned Maintenance Ratio by Cost at RWRF Collection System Failure Rate Condition Assessment Coverage for Treatment Facilities Percentage of Sewer Collection System Inspected 	 Energy Use per Volume Processed Cost per KWH Produced Percentage of KWH Demand Produced by PGF Chemical Use per Volume Processed Maintenance Cost per Million Gallons Treated at RWRF O&M Cost per Volume Processed Mile per Day of Sewer Mainline Cleaned per Crew 	 ERP Coverage & Preparedness Total Recordable Incident Rate Percent of Lost Work Days due to OJI to Total Work Days 	 Number of Certifications Above Minimum Requirements Training Hours per Employee Percentage of Employee Evaluations Completed on Time Number of Positions Vacant Number of Division Administrative Policies Reviewed and Updated
INITIATIVES Time-bound, resourced improvement projects for achieving our targets and objectives	 Conduct an annual audit of SSMP Improve ESS efficiency through paperless process Inspect all industrial users on a quarterly basis Gain Council approval of Recycled Water Master Plan and EIR Implement Phase I of Tertiary Treatment and Distribution 	 Annually update the financial planning model Implement program to improve inventory control Gain formal approval for reserve policies 	 Complete updates of Treatment Master Plan Establish guidelines on how to categorize work orders Complete updates of Collection System Master Plan Develop an asset condition assessment program 	 Develop a measure to monitor the usage of thermal energy usage Evaluate the opportunities for a power purchase agreement Identify renewable energy opportunities Optimize ferric chloride usage by determining minimum dosage requirements 	 Develop an ERP training program Develop a process for performing a root cause analysis of all accidents 	Identify opportunities to improve employee engagement and leadership in industry associations

Solid Waste Management Division Strategic Business Plan

PERSPECTIVES Strategic priorities that	Cust	omers	Financial	Internal Processes	Learning & Growth	
ensure balance across all stakeholders	Customers		, maneia.	internal i locesses	Learning & Growth	
	Product Quality	Customer Satisfaction	Financial Viability	Operational Optimization	Employee and Leadership Development	
UTILITY ATTRIBUTES Desired outcomes for our organization to use in making improvements	Collects refuse, recyclable materials and green waste in full compliance with regulatory and reliability requirements and consistent with customer, public health, and ecological needs.	Provides reliable, responsive, and affordable services in line with explicit, customeraccepted service levels. Receives timely customer feedback to maintain responsiveness to customer needs and emergencies.	Understands the full life-cycle cost of the utility and establishes and maintains an effective balance between asset values, O & M expenditures, and operating revenues. Establishes predictable rates, consistent with community acceptability, adequate to recover costs, provide for reserves, and plan and invest for future needs.	Ensures ongoing, timely, costeffective, reliable, and sustainable performance improvements in all facets of its operations. Minimizes resource use, loss, and impacts from day-to-day operations. Maintains awareness of information and operational technology developments to anticipate and support timely adoption of improvements.	Recruit and retain a workforce that is competent, motivated, adaptive and safeworking. Establish a participatory, collaborative organization dedicated to continual learning. Ensure employee institutional knowledge is retained. Emphasize opportunities for professional and leadership development.	
OBJECTIVES The highest level goals of our organization	 Ensure adequate sorting of commodities/materials by customers e.g. landfill, recycling, green waste, and bulky goods Ensure compliance with state and local mandates for diversion 	 Provide timely, reliable service to all customers Leave neighborhoods better than we found them 	 Ensure effective budget development and compliance Develop an adequate and equitable rate plan Maintain adequate reserves for landfill maintenance 	 Expand the use of technology Continue to improve process efficiencies Improve fleet management 	 Enhance and develop staff through training efforts Provide promotional opportunities for staff Improve internal division communications 	
MEASURES Quantitative indicators that show when we have achieved our objectives	 Percentage residual waste Percentage diversion rate (Internal) Percentage diversion rate (External) 	 Number of Skips per 10,000 Households Response Time on Skips Percentage of Routes Completed on Time Number of Complaints per 10,000 Households Response Time on Special Requests Customer Phone Call Response Time Drop Rate on Customer Phone Calls Number of Route Inspections 	 Percentage of Annual O&M Budget Spent YTD Percentage of Annual Revenues Received YTD Total Dollars Available in Reserves 	 Percentage of Containers with RFID Tags Percentage of Vehicles with New GPS System Operating Cost per Ton Number of Tips per Hour Total Dollars Available for Fleet Replacement 	 Percentage of Staff Receiving Training Training Hours per Employee Percentage of Employee Evaluations Completed on Time Total Recordable Incident Rate Percentage of Lost Work Days due to OJI to Total Work Days Number of Internal Promotions Employee Survey Score- Adequate Communication between Work Groups 	
INITIATIVES Time-bound, resourced improvement projects for achieving our targets and objectives	 Hold outreach events related to residual rates Hold outreach events related to diversion rates 	 Hold outreach events on the number of skips Increase the focus on driver responsibility for skips Develop a skip fee in the Master Fee Schedule 	 Gain approval for a new 5-year rate plan Check current vehicle replacement price mid-life, adjust monthly depreciation if needed 	 Develop and implement a route balancing program Successfully implement RFID program Upgrade GPS System Reduce operating hours 	 Identify opportunities with industry associations Develop an acting position program Develop a cross training program Formation of newsletter with major contributions from staff Open dialogue messages and open forum meetings for discussion of division direction and implementation 	















A Nationally Accredited Public Utility